## **REMARKS**

## Claim Rejections - 35 USC § 103

Claims 1, 9-11 are rejected under 35 U.S.C 103(a) as being unpatentable over Sato et al (U. S. Patent no. 4,670,324). Specifically, the Office alleges that while the '324 reference does not disclose specifically the dimensions claimed, they would be obvious to one of ordinary skill in the art at the time the invention was made. The Applicant has carefully reviewed the cited reference and respectfully disagrees.

The '324 reference only discloses recessed ribs being recessed into one surface in contrast to the claimed invention. As the cited reference does not disclose every element of the claimed invention, the Applicant respectfully submits the claimed invention is patentably distinct over the '324 reference.

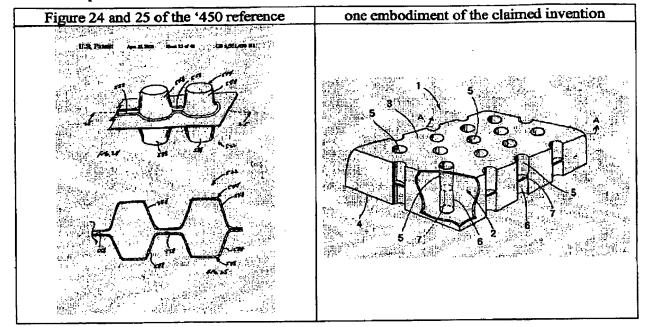
Additionally, the '324 teaches away from recessing ribs from two opposing surfaces. The object of the '324 reference, as disclosed, is to provide a hollow plate capable of being molded without making its profile complicated, and keeping the reinforcement members out of sight, and easy to form its outer surface plain. See column 1 lines 60-63. This object cannot be achieved by recessing ribs from both opposing surfaces of the hollow plate. See column 1 lines 41-44.

Accordingly, the Applicant respectfully submits that, at least for the above reasons the claims 1, 9-11, as amended, are patentably distinct from the '324 reference. The applicant therefore respectfully requests that the Office withdraw its rejection based on that reference to these claims.

Claims 1, 12 and 13 are rejected under 35 U.S.C 103(a) as being unpatentable over Thomas et al. (U. S. Patent no. 6,551,450). Specifically, the Office alleges that while the '324 reference does not disclose specifically the dimensions claimed, they would be obvious to one of ordinary skill in the art at the time the invention was made. The Applicant has carefully reviewed the cited reference and respectfully disagrees. Applicant respectfully directs the Office's attention to Figure 24 and 25 of the '450 reference, a perspective and sectional view of the '450 reference respectively. See Table 1.

Page 4 of 7

Table 1 comparison between the '450 reference and one embodiment of the claimed invention



The Office alleges the '450 reference describes the inter-nodal space between adjacent air nodes as a rib. The Office cites Figure 34 of the '450 reference in support of its allegation. Figure 25 of the '450 reference (reproduced above) is analogous to Figure 34. The Applicant, however, respectfully submits the '450 reference discloses an inter-nodal space, in marked contrast with the rib of the claimed invention. This dissimilarity is evident by comparing the perspective view of the '450 reference against a perspective view of one embodiment of the claimed invention. See Table 1. Consequently, the Applicant respectfully submits the '450 reference does not disclose the rib of the claimed invention and the claimed invention is patentably distinct over the '450 reference.

Additionally, in contrast to the claimed invention, as amended, the air nodes of the '450 reference are expandable and contractible. The '450 reference describes air nodes capable of expanding and contracting in response to a downward pressure. See column 29 lines 49-51. In the absence of a downward pressure the air nodes return to their original state. The first and second ribs of the claimed invention, however, are structured to be crushed during an impact.

Accordingly, for at least the aforementioned reasons, the Applicant respectfully submits the claimed invention would not be obvious to one skilled in the art in light of the '450 reference and claims 1, 12 and 13, as amended, are not unpatentable over the '450 reference. The applicant, therefore respectfully requests that the Office withdraw its rejection of these claims.

Claims 1, 12 and 14 are rejected under 35 U.S.C 103(a) as being unpatentable over Thomas et al (U.S. Patent no. 6,551,450) in view of Sell Jr. et al. (U.S. Patent no. 6,385,864). Specifically, the Office alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the rib ends one convex and one concave in order to allow the absorber to deform properly. The Applicant respectfully disagrees.

MPEP §2143.01, states that "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art." No motivation to combine the '450 and the '864 references is evident from the cited references.

The '450 reference, as previously described, discloses air nodes expanding and contracting in response to a downward force. The '864 reference discloses tensile members flexing in response to compressive loads without not interfering with the cushioning properties of air. See column 6 lines 11-19. The '864 reference further discloses a large diameter portion having a curvature to allow for the smaller diameter portion to flex by rolling slightly when the bladder is compressed slightly. See column 14 lines 46-52. One of ordinary skill in the art would not be motivated to combine the expandability and contractibility of the '450 reference with flexibility of the '864 reference to achieve the crushability of the claimed invention. Accordingly, the Applicant respectfully submits that this is an improper combination of references, in that, when taken as a whole, there is no motivation or suggestion to combine the references to achieve the Applicant's claimed invention.

Section 2143.01 of the MPEP further states: "The mere fact that references can be combined or modified is not sufficient to establish prima facie obviousness." Additionally, the "level of skill in the art cannot be relied upon to provide the suggestion to combine references." Thus, it is inappropriate to use the Applicant's claims as a road map in selecting a combination of

Page 6 of 7

references to form a 103 rejection. Rather, there must be some objective reason to combine the teachings of the references to make the claimed invention. Applicant cannot find such an objective reason. The applicant therefore submits that the claims as amended are patentably distinct from the cited references, for at least the above reasons. The applicant, therefore, requests that the Office withdraw its rejections of these claims.

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,

Vernon C. Maine, Reg. No. 37,389 Scott J. Asmus, Reg. No. 42,269

Andrew P. Cernota, Reg. No. 52,711

Attorneys/Agents for Applicant

Cus. No. 24222 Maine & Asmus PO Box 3445 Nashua, NH 03061-3445 Tel. No. (603) 886-6100, Fax. No. (603) 886-4796 Info@maineandasmus.com